The Green Procurement Program: Implications and Applications to the Acquisition of Materiel Systems

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Green procurement (GP) encompasses several procurement preference programs that apply to purchases made by the federal government, programs that consider environmental and energy-saving attributes in the products that we procure. Together, these programs encourage DOD acquisition purchasers to make environmental benefits a key part of their procurement decisions. Energy savings, reduction in landfill use, reduced pollution, and long-term environmental sustainability are just a few of the benefits of GP. Examples of green purchases include hybrid vehicles, absorbent material made from cottonseed lint, energy-efficient computers, and recycled copy paper.

Daegu electric vehicles are being evaluated as replacements for the Army's gasoline-fueled non-tactical vehicle fleet. (Photo courtesy of the U.S. Army Environmental Command.)

This article provides a brief overview of federal, DOD, and Army GP requirements and responsibilities. It offers ideas for applying GP to the acquisition of materiel systems and cites recent examples of DOD's successful use of GP.

Why Green Procurement?

The short answer is because it's mandated by federal regulations, laws, and executive orders (EOs). EO 13514, *Federal Leadership in Environmental, Energy, and Economic Performance*, requires that 95 percent of new contract actions for products and services other than acquisition weapon systems be energy-efficient, water-efficient, biobased, environmentally preferable, and non-ozone depleting; contain recycled content; and use nontoxic or less toxic alternatives. EO 13423, *Strengthening Federal Environmental, Energy, and Transportation Management*, requires that federal purchasers show preference for products that conserve resources such as fossil fuels, water, and energy.

Part 7 of the *Federal Acquisition Regulation* (*FAR*) emphasizes procurement of recycled-content and environmentally preferable products and services. Part 7.105(b) (16) requires that acquisition plans "discuss all applicable environmental and energy conservation objectives associated with the acquisition… ."

The *Resource Conservation and Recovery Act* (*RCRA*), Section 6002, requires federal agencies to develop programs to promote the procurement of products that the Environmental Protection Agency (EPA) designates as helping to create and sustain markets for recycled products.

But beyond the EOs, regulations, and laws, there are many practical, compelling reasons for implementing GP. GP uses the power of federal spending to do something positive for people's health and the environment. It creates markets for environmentally beneficial products and saves money and resources, because greener products require less energy. GP reduces pollution and adverse health effects, and those positive health implications have been linked to fewer lost workdays. GP provides incentives to develop new environmentally friendly technologies, and it promotes environmental stewardship and sustainability.

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Requirements and Responsibilities

The August 2004 *Green Procurement Policy and Strategy* formally established DOD's GP program and metrics. It requires review of proposed procurement actions for inclusion of GP provisions, consideration of environmental and energy aspects of planned acquisitions or procurements, and identification and development of specifications based on consideration of all of the green attributes identified.

In short, the policy requires that green products and services be considered as a first choice for all procurement. The Army's *Green Procurement Policy Memorandum*, dated Nov. 22, 2006, established the Army GP Program. It fully supports DOD's GP policy and calls for 100-percent compliance with GP requirements.

Requirements imply responsibilities. Procurement request originators and acquisition program managers (PMs) are responsible for identifying whether green products and services are available and can satisfy requirements for price, performance, and availability. They must ensure that relevant GP requirements are identified before submitting a procurement request to the contracting office. They do this by consulting with contract and environmental specialists to prepare statements of work (SOWs) or specifications that incorporate relevant GP requirements; document exceptions to GP requirements; apply life-cycle cost concepts to determine cost-effectiveness of green alternatives; and provide for oversight of contract execution to ensure that GP requirements are addressed in accordance with the terms of the contract.

Procurement offices review requests for green supplies and services; provide guidance to procurement request originators and PMs; incorporate GP language and *FAR* provisions and clauses into contract SOWs; ensure that all contract actions meet *FAR* requirements for GP through execution and close-out; and place any necessary written justifications in the contract file to document why GP options were not included in the procurement action.

GP is a good idea. But a good idea that ignores reality can quickly devolve into a bad idea. Recognizing this, DOD's GP policy encourages incorporation of GP when it is consistent with the demands of mission, efficiency, and cost-effectiveness. Additionally, *RCRA* provides exceptions to the procurement of recycled-content and biobased products when procurement of those products is cost-prohibitive; when they do not meet reasonable performance standards; or when they are not available within a reasonable time or at a sufficient level of competition.

That said, there are many practical ways to incorporate GP into the acquisition of materiel systems. PMs who develop technical requirements for SOWs can determine whether the system or contract could use EPA- or U.S.

The California National Guard has adopted fuel cell systems powered by photovoltaic panels on some of their posts. These innovative hydrogen cells use a solar array to convert water into hydrogen gas through electrolysis and can be used to power various facilities. (Photo courtesy of the U.U.S. Army Environmental Command.)

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Department of Agriculture-designated products, and then include the applicable recovered-material or biobased standards for those products as specifications or technical exhibits.

PMs can also determine if there are green alternatives to the products or services used in the performance of the contract. They can identify other applicable GP elements (such as energy and water efficiency) that may apply, and include appropriate requirements in the SOW.

Sounds Good; Does It Work?

Properly applied, DOD's GP policy produces positive results. There are numerous examples of its successful application. Performance-based contracting was used to incorporate green elements into the post-Sept. 11 Pentagon renovations, and 7½ tons of steel recovered from the World Trade Center was used to construct the bow of the USS New York. The Virginia Class Submarine design used recovered materials and removed cadmium and hexavalent chromium, while the AH-64 Apache helicopters now use a chrome-free primer. The U.S. Army Tank-Automotive and Armaments Command developed a retread tire specifications and qualifications list. The Naval Facilities Engineering Command incorporated sustainability and green products into construction specifications. Crane Army Ammunition Activity reused Mobile Jettison Unit decoy flares. The F/A-18 Super Hornet fighter, the Stryker, and other armored vehicles use a non-ozone-depleting fire suppressant. The F-35 Joint Strike Fighter program reduced hazardous material use by 75 percent, and the unmanned aircraft system Solar Eagle now uses some solar power.

Conclusions

GP is required by law, regulation, and EO. Properly applied, it can contribute to a cleaner environment and lower overall program costs. Both DOD and the Army have established policies requiring GP but also recognizing that its application may not always be practical. GP is a useful tool for "greening" the acquisition of materiel systems, and its utility has been demonstrated through numerous successful applications in DOD.

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